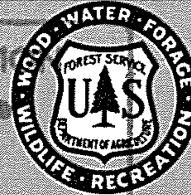


## RESEARCH NOTE

INTERMOUNTAIN STATION



CENTRAL STATES FOREST EXPERIMENT STATION

COLUMBUS, OHIO

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COOPERAGE LOGS AND BOLTS--PRODUCTION AND CONSUMPTIONIN THE CENTRAL STATES--1962Production Down 20 Percent

In 1962, 96 million board feet of cooperage logs and bolts valued at 3.8 million dollars on the stump (about 9 million dollars delivered to the mill) were harvested from the Central States (table 1). This total was 25 million board feet or 20 percent less than the volume produced in the Region during 1960. In 1962, the tight cooperage industry curtailed production temporarily while awaiting the outcome of proposals to change federal regulations regarding the re-use of bourbon barrels. Despite this production decline, the Central States Region remains the leading cooperage-log-producing area in the United States and accounts for more than one-third of the national output.

Table 1.--Production of cooperage logs and bolts by state, 1962

State	:	:	Change	:	Value
	:	:	from	:	as
	:	:	1960	:	stumpage <sup>2/</sup>
	<u>Thousand</u>	<u>Percent</u>	<u>Percent</u>		<u>Thousand</u>
	<u>board feet</u> <sup>1/</sup>				<u>dollars</u>
Missouri	27,341	28.5	- 33.1		1,094
Illinois	25,034	26.1	- 8.7		1,001
Kentucky	21,049	21.9	- 25.5		842
Ohio	12,427	12.9	- 8.6		497
Indiana	6,243	6.5	- 9.9		250
Iowa	3,905	4.1	+ 9.9		156
Total	95,999	100.0	- 20.4		3,840

<sup>1/</sup> International 1/4-Inch Log Rule.<sup>2/</sup> Calculated on basis of \$40 per thousand board feet.

All the central states but Iowa recorded significant decreases in production since 1960. The harvest of cooperage timber from Missouri fell off one-third but this State still maintained its production lead over the other central states by producing 29 percent of the Region's total. Illinois ranked a close second.

About 97 percent of the cooperage volume harvested in 1962 went into the manufacture of tight cooperage--primarily for bourbon barrels. White oak was the principal species used.

Slack-cooperage production has fallen off consistently in recent years due to competition from new packaging products such as fiber boxes, cotton and paper bags, and fiber drums. Only 2.7 million board feet of slack-cooperage timber was harvested from the Central States in 1962 compared with 8.6 million board feet in 1960. Since slack barrels are used for products such as meat, hardware, and nails, they need not be liquid tight and many timber species are used in their manufacture. The primary species harvested for slack cooperage in the Central States are soft-textured hardwoods such as gum, sycamore, elm, soft maple, hackberry, and cottonwood.

#### Consumption Off 22 Percent

Central States stave and heading mills consumed 96 million board feet of cooperage logs and bolts in 1962--22 percent less than in 1960 (table 2). Only 98 mills were active in 1962 compared with 123 in 1960 (fig. 1). Consumption per individual mill ranged from as little as 3,000 board feet to as much as 3.9 million board feet and averaged 982 thousand board feet. Missouri accounted for 36 of the 98 active mills in the Region and 29 percent of the total consumption.

During 1962, the Region's mills obtained 93 percent of their cooperage timber needs from the state in which they are located (fig. 2). Another 6 percent came from other central states and the remainder from outside the Region. Ohio mills depended on Ohio-grown wood for 98 percent of their requirements. Only in Iowa did mills get more than 15 percent of their cooperage timber from outside the State. Iowa mills (all are located near the State line) depended on Missouri and Illinois for 23 percent of their wood supply.

Table 2.--Consumption of cooperage logs and bolts by state, 1962

	: Active	:	:	Change
State	: stave	:	Volume consumed	: from
	: mills	:	:	1960
	<u>Number</u>		<u>Thousand</u>	<u>Percent</u>
			<u>board feet</u> <sup>1/</sup>	<u>Percent</u>
Missouri	36		27,966	29.1
Illinois	16		25,366	26.4
Kentucky	26		20,506	21.3
Ohio	10		12,654	13.1
Indiana	6		6,977	7.2
Iowa	4		2,767	2.9
Total	98		96,236	100.0
				- 31.4
				- 5.7
				- 31.1
				- 14.1
				+ 1.7
				- 37.3
				- 22.0

<sup>1/</sup> International 1/4-Inch Log Rule.

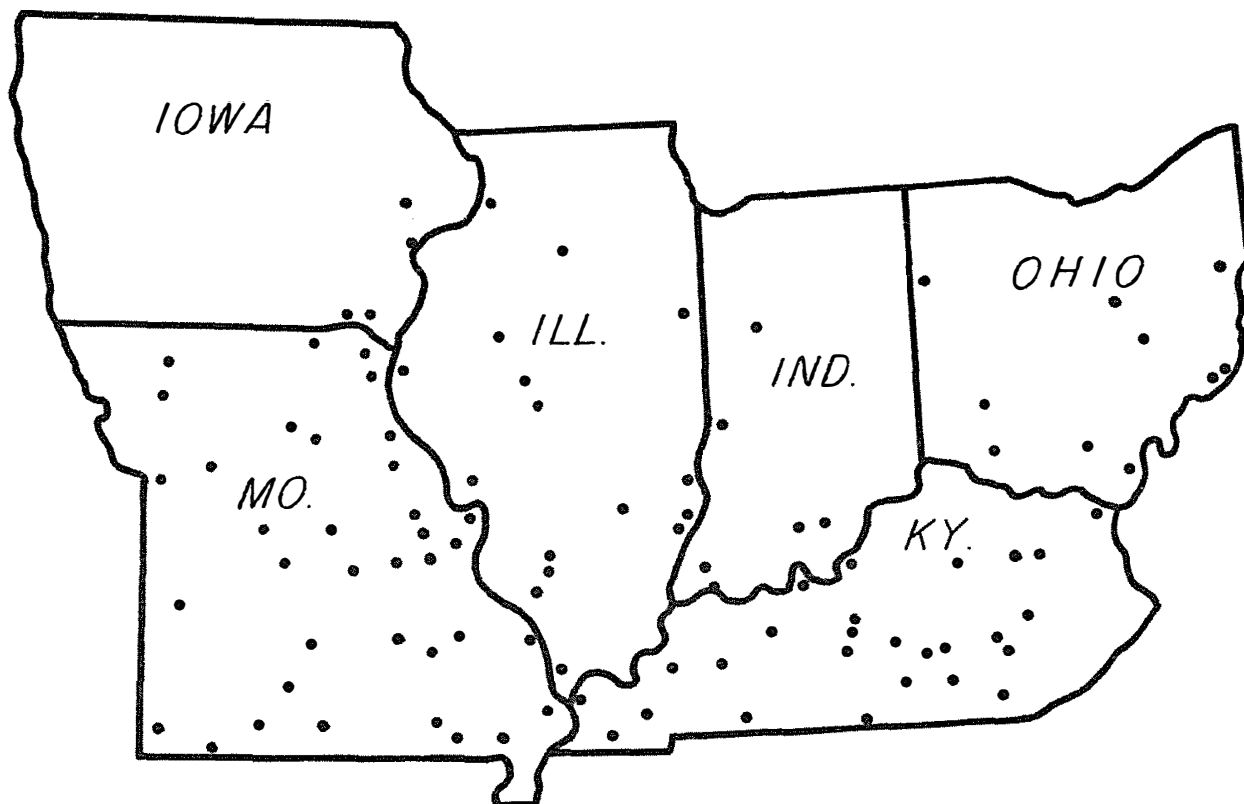


Figure 1.--Location of cooperage mills active in the Central States during 1962.

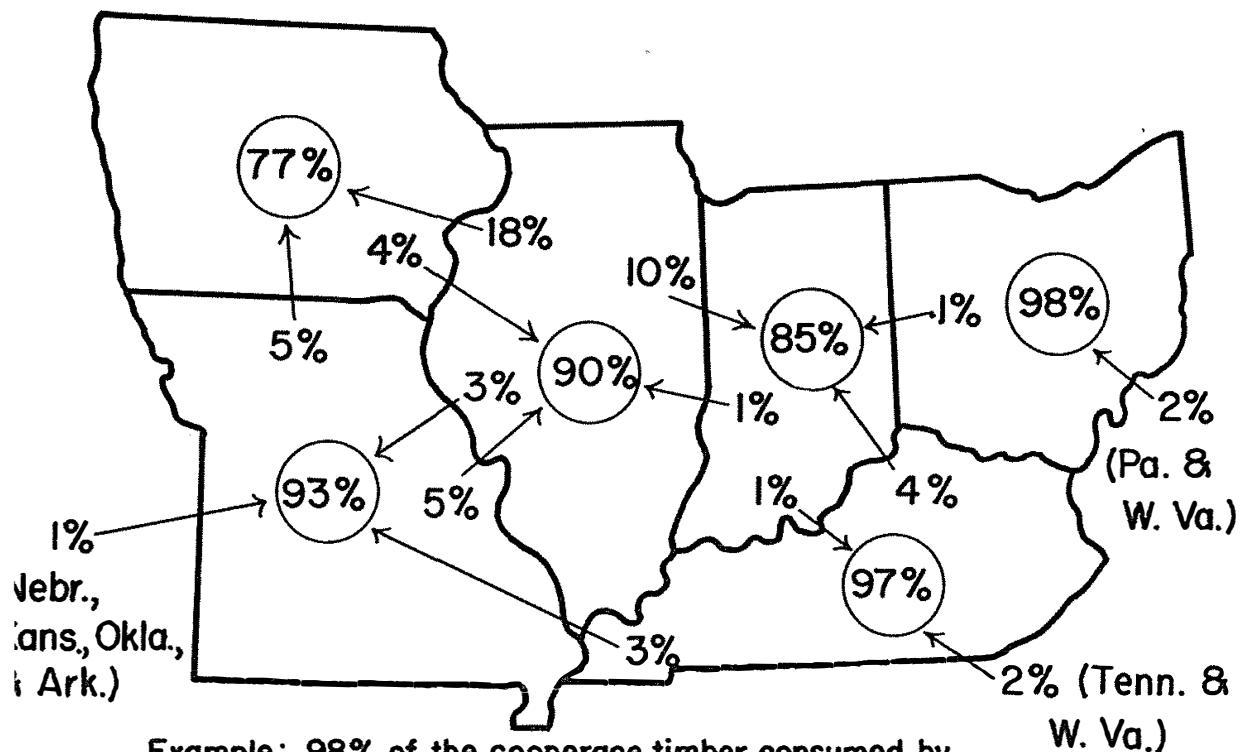


Figure 2.--Source of cooperage timber consumed by Central States mills, 1962.

Shipments of cooperage timber into the Region amounted to only 940 thousand board feet, about 2 1/2 million board feet less than in 1960. Eight mills, four in Missouri, two in Ohio, and two in Kentucky, were the recipients. Tennessee, Kansas, and West Virginia were the sources of most of the incoming shipments.

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